

### Claims

1. A multilayered connection plate comprising layers of a dielectric material having conductive paths on their surfaces, the layers being connection layers, and contact nodes in the form of metallized contacts mutually aligned and interconnected electrically and mechanically by a conductive binding material, *characterized* in that the contact nodes are made in the form of joints between the contacts, some of which contacts are contact pads coupled with conductive paths of the underlying connection layer, and other contacts aligned with said pads are made in the form of metallized holes formed as truncated cones in the upper-lying connection layer, the lesser bases of the truncated cones being faced to the contact pads of the underlying connection layer, and the greater bases of the truncated cones being coupled with the conductive paths on the upper side of the upper-lying connection layer.
2. The multilayered connection plate according to claim 1, *characterized* in that the contact pads are made flat.
3. The multilayered connection plate according to claim 1, *characterized* in that the upper bases of the truncated cones coupled with the conductive paths on the surface of the connection layer are made with metallized rims around the periphery of the bases.
4. The multilayered connection plate according to claim 3, *characterized* in that the diameter  $D$  of the greater base of the truncated cone, the width  $h$  of the metallized rim, the diameter  $d$  of the lesser base of the truncated cone, the thickness  $t$  of the dielectric material of the connection layer and the minimal width  $L$  of the respective contact pad on the underlying connection layer are coupled with the following relationship:
 
$$L \geq D + 2h = d + 2t + 2h.$$
5. A multilayered connection plate comprising layers of a dielectric material with conductive paths on their surfaces, the layers being connection layers,

09830634.042701

and contact nodes in the form of metallized contacts mutually aligned and interconnected electrically and mechanically by conductive binding material, *characterized* in that the conductive paths are placed on both sides of every connection layer and interconnected with metallized through holes within every layer, insulating layers with metallized through holes are placed between the connection layers, and the contact nodes consist of metallized holes in the form of truncated cones made in the upper-lying connection layer, metallized through holes in the insulating layer, and contact pads coupled by conductive binding material on the underlying connection layer, the lesser bases of the truncated cones being jointed with the upper bases of metallized through holes of the insulating layer, and the lower bases of the through holes are jointed with the contact pads of the underlying connection layer, coupled with the conductive paths on the upper side of the underlying connection layer, the upper bases of the truncated cones being coupled with the conductive paths placed on the upper side of the upper-lying connection layer.

6. The multilayered connection plate according to claim 5, *characterized* in that the contact pads are made flat.

7. The multilayered connection plate according to claim 5, *characterized* in that the greater and lesser bases of the truncated cones coupled with the conductive paths on the surfaces of every connection layer are made with metallized rims around the periphery of the bases.

8. The multilayered connection plate according to claim 5, *characterized* in that the metallized through holes of the insulating layers are made in the form of cylinders with metallized rims around the periphery of the upper and lower bases.

A' >

09030634 042701